

ANNOTATED SHEET
TO SHOW
CHANGES MADE

FIG.7

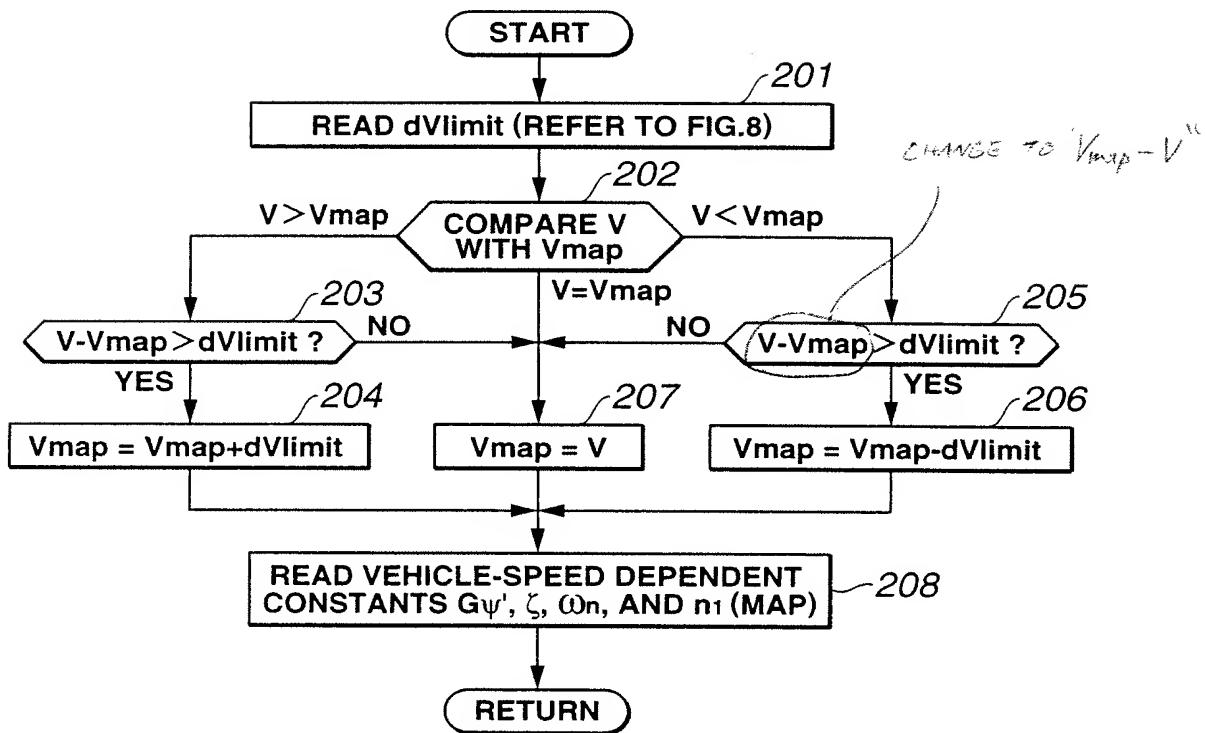
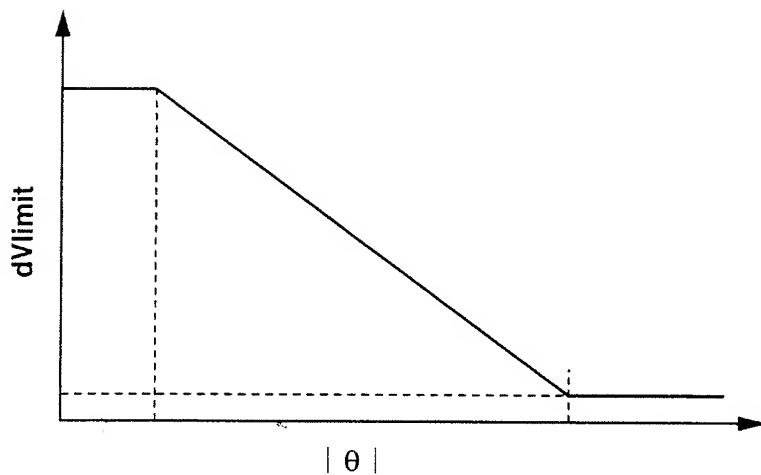
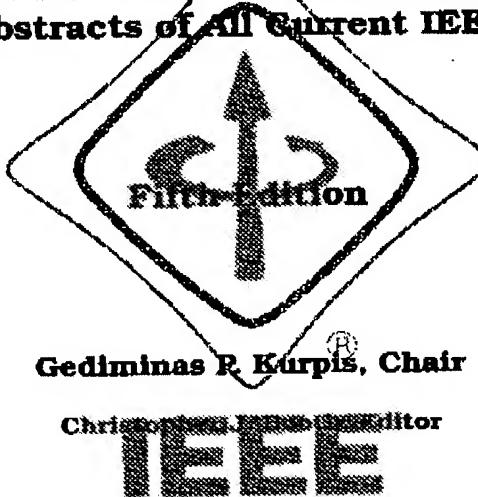


FIG.8



IEEE Std 100-1992

**The New IEEE Standard Dictionary
of Electrical and Electronics Terms**
[Including Abstracts of All Current IEEE Standards]



716

Limiter

Geometric
812-1984A device to
exciting a
voltage. (60)engineering).
the source.
ce may be
ensity and
or of an
ed by its
dates. (126)circuit). The
light load,
rated load.
portant in
ular effect
saturat-
; rectifier
1962w. (1)

a limit check will reveal an error situation if an attempt is made to add a fifth transaction to a record. 610.5-1990

limit cycle (control systems). A closed curve in the state space of a particular control system, from which state trajectories may recede, or which they may approach, for all initial states sufficiently close to the curve. [3]

limit cycle, stable (control systems). One that is approached asymptotically by a state trajectory for all initial states sufficiently close. [3]

limit cycle, unstable (control systems). One from which state trajectories recede for all initial states sufficiently close. [3]

limited availability (telephone switching systems). Availability that is less than the number of outlets in the desired group. 812-1977w

limited-domain data element. A data element whose domain is bounded. For example, a data element SEX with a domain of {M,F}. 610.5-1990

limited proportionality, region of. See: region of limited proportionality.

limited signal (radar). A signal that is limited in magnitude by the dynamic range of the system. 686-1982. (42)

limited stability. A property of a system characterized by stability when the input signal falls within a particular range and by instability when the signal falls outside this range. 154-1953w

limiter (1) (excitation systems for synchronous machines). An element of the excitation system which acts to limit a variable by modifying or replacing the functions of the primary detector element when predetermined conditions have been reached. Notes: Examples: (A) An under-excitation limiter prevents the voltage regulator from lowering the excitation of the synchronous machine below a prescribed level. (B) An over-excitation limiter prevents the voltage regulator from raising the excitation of the synchronous machine above a level that would cause a thermal overload in the machine field; refer to ANSI C50.13-1977. (C) A volts per hertz limiter acts, through the voltage regulator to correct for a machine terminal voltage to frequency ratio that is considered abnormal. (D) Other types of limiters may be used to control various quantities, such as, rotor angle, excitation output, etc. See: ferri-diode limiter; ferrite limiter; gyromagnetic limiter; multipactor limiter; passive limiter; p-i-n diode limiter; plasma limiter; quasiactive limiter. 421.1-1986

(2) (data transmission). (1) A device in which some characteristic of the output is automatically prevented from exceeding a predetermined value. (2) More specifically, a transducer in which the output amplitude is substantially linear with regard to the input up to a prede-

Limiter circuits

717

terminated value and substantially constant thereafter. Note: For waves having both positive and negative values, the predetermined value is usually independent of sign. 599-1985w (3) (rotating machinery). An element or group of elements that acts to limit by modifying or replacing the functioning of a regulator when predetermined conditions have been reached. Note: Examples are minimum excitation limiter, maximum excitation limiter, maximum armature-current limiter. [19]

(4) (radio receivers). A transducer whose output is constant for all inputs above a critical value. Note: A limiter may be used to remove amplitude modulation while transmitting angle modulation. See: radio receiver; transducer. 145-1983

(5) (excitation systems). A feedback element of the excitation system that acts to limit a variable by modifying or replacing the function of the primary detector element when predetermined conditions have been reached. 421-1973

Limiter circuits (analog computers). A circuit of nonlinear elements that restrict the electrical excursion of a variable in accordance with some specified criteria. "Hard limiting" is a limiting action with negligible variation in output in the range where the output is limited. "Soft limiting" is a limiting action with appreciable variation in output in the range where the output is limited. A "bridge limiter" is a bridge circuit used as a limiter circuit. In an analog computer, a "feedback limiter" is a limiter circuit usually employing biased diodes shunting the feedback component of an operational amplifier; an "input limiter" is a limiter circuit usually employing biased diodes in the amplifier input channel that operates by limiting the current entering the summing junction. "Linear system or element"—a system with the properties: if y_1 is the response to x_1 and y_2 is the response to x_2 , then (i) $y_1 + y_2$ is the response to $(x_1 + x_2)$ and (ii) ky_1 is the response to kx_1 . See: stop. 716-1977

limiting (automatic control). The intentional imposition or inherent existence of a boundary on the range of a variable, for example, on the speed of a motor. 421-1973. (3)

limiting ambient temperature (1) (electric equipment) (thermal classification of electric equipment and electrical insulation). The highest (or lowest) ambient temperature at which electric equipment is expected to give specified performance under specified conditions, for example, rated load. 1-1986

(2) (equipment rating). An upper or lower limit of a range of ambient temperatures within which equipment is suitable for operation at its rating. Where the term is used without an adjective the upper limit is meant. See: limiting insulation system temperature. (83)

limiting angular subtense (α_{\min}) (laser-maser). The apparent visual angle which divides intra-

beam view

limiting up
circular a
exposurelimiting ex
lowest fu
level of ex
of the faclimiting h
equiper
tric equal
The high
of the ins
is operat
ally at ma
ambient tlimiting ho
ing insullimiting ins
hot; dist
temperatu
specified.the object
the insulalimiting in
ment rat
ing insul
amblep
spot tem
system to
limiting in
ment rat
ture rise
See: limi
ture.limiting ip
tion). The
it has em
the emlimiting w
tube). Th
can be vi
on a dispheight (T
(2) (tele
resolver.
maximum
discriminFor a nu
white line
the picturlimiting te
transfor
which a
operated
normal li

limit, lower

limit of err